



## Monthly New Awards – September 2018

### **Abdolvand, Dr. Reza**

Acoustoelectric Amplification in Composite Piezoelectric-Silicon Cavities: A Circuit-Less Amplification Paradigm for RF Signal Processing and Wireless Sensing

National Science Foundation

\$319,999

College of Engineering and Computer

### **Ahmed, Kareem A**

Fuel Injectors for Combustion Instability Reduction

Creare, LLC

College of Engineering and Computer Science

### **Amezcuca Correa, Rodrigo**

19 Fibers Photonics Lantern

Harris Corporation

\$20,000

College of Optics and Photonics

### **Amezcuca Correa, Rodrigo / Li, Guifang / Schulzgen, Axel**

Multi-Core Fiber True-Time Delays for Ultra-Wideband Analog Signal Processing Systems

Harris Corporation

\$90,000

College of Optics and Photonics

### **Azevedo, Roger**

Convergence HTF: Collaborative: Workshop on Convergence Research about Multimodal Human Learning Data during Human Machine Interactions

National Science Foundation

\$12,515

College of Community Innovation and Education

### **Batarseh, Issa E**

Engineering Research Center for Energy Storage System Enabled Society

National Science Foundation

\$100,000

College of Engineering and Computer Science

**Bridge, Candice M**

Public Service to the Offices of Jonathan Rose Public Attorney  
Jonathan Rose Public Attorney  
\$530  
College of Sciences – Chemistry

**Brisbois, Elizabeth**

Bioinspired liquid-infused nitric oxide (NO) releasing surfaces for advanced insulin delivery systems  
JDRF International  
\$373,999  
College of Engineering and Computer Science

**Brisset, Julie Carine Margaret / Pinilla-Alonso, Noemi**

Active Asteroids: Investigating Surface Structural Failure as a Source of Mass Loss  
National Science Foundation  
\$503,603  
Florida Space Institute

**Chanda, Debashis / Reinhart, Debra R**

Detection and Separation of Recyclable Plastics from Municipal Solid Waste  
University of Florida Board of Trustees  
\$46,000  
NanoScience Technology Center

**Chavis, Gordon**

Florida Education Fund McKnight Center of Excellence  
Florida Education Fund  
\$26,000  
Student Development and Enrollment Services

**Chow, Lee**

Synthesis of doped metal oxides  
Lee Chow  
\$3,000  
College of Sciences – Physics

**Das, Tuhin**

Dynamics and Control of Tethered Multi-Rotor UAVs with Switchable Powered and Autorotation Modes  
National Science Foundation  
\$313,499  
College of Engineering and Computer Science

**Dickerson, Andrew K / de Bekker, Adriana Maria / Ghosh, Ranajay**

Fur Anti-Fouling via Physiological Mechanisms  
National Science Foundation  
\$449,805  
College of Engineering and Computer Science

**Dodd, Melissa Dawn**

Legislating Gun Reform: Spiral of Advocacy  
Villanova University Waterhouse Family Institute  
\$5,000  
College of Sciences - Department of Communication

**Emrich, Christopher**

Puerto Rico Impact and Unmet Needs Assessment  
Horne, LLP  
\$28,000  
College of Community Innovation and Education

**Foroosh, Hassan**

Polarized and Stereo Imaging for 3D Modeling  
BRIDG  
\$217,659  
College of Engineering and Computer Science

**Guo, Zhishan**

CRII:CSR: NeruoMC--Parallel Online Scheduling of Mixed-Criticality Real-Time Systems via  
Neural Networks  
National Science Foundation  
\$174,946  
College of Engineering and Computer Science

**Hasan, Samiul**

CRISP 2.0 Type 2: Collaborative Research: Organizing Decentralized Resilience in Critical  
Interdependent-infrastructure Systems and Processes  
National Science Foundation  
\$200,189  
College of Engineering and Computer Science

**Hoffman, Phil**

General Programming Support for WUCF-TV 2018-2019  
UCF Foundation, Inc  
\$9,223  
Division of Strategy, Marketing, Communications, and Admissions

**Huo, Qun**

Bomax Hydrogen- Nanoparticle Spectroscopy  
BoMax Hydrogen, LLC  
\$2,000  
College of Sciences - Chemistry

**Jacques, Peter J**

Sustainable Development Practices and Food Security in Morocco  
The Hollings Center for International Dialogue  
\$12,995  
College of Sciences - Political Science

**Kuebler, Stephen M**

2018 High School Summer Research Experience in the Kuebler-Group at UCF with the REAP/AEOP Program  
Academy of Applied Science  
\$1,000  
College of Optics and Photonics

**Li, Guifang**

Random Channel Cryptography  
National Science Foundation  
\$225,000  
College of Optics and Photonics

**Li, Guifang**

High-Speed Laser Communication Systems  
Skyloom Global Corporation  
\$64,991  
College of Optics and Photonics

**Lugo, Ramon**

Arecibo Support to NASA Programs  
NASA Shared Services Center  
\$1,500,000  
Florida Space Institute

**Lugo, Ramon / Britt, Daniel T / Cannon, Kevin Michael**

Exolith Lab Simulated Planetary Materials  
Various  
\$9,801  
Florida Space Institute

**Mahalanobis, Abhijit**

Modeling Adversarial Activity  
Lockheed Martin Missiles and Fire Control  
\$50,000  
Center for Research in Computer Vision

**Manero, Albert / Sparkman, John Garry**

Limbitless Arm A  
Limbitless Solutions Inc  
\$90,000  
Administration and Finance

**Masternak, Michal / Florczyk, Stephen Joseph**

Role of adipose tissue cellular composition on healthy metabolism  
National Institute on Aging  
\$422,843  
College of Medicine

**Plamondon, Mr. Brian D**

Enhanced Dynamic Geo-Social Environment (EDGE) and Virtual Environments Research and Development

Cole Engineering Services, Inc.

\$75,000

Institute for Simulation and Training

**Rahnavard, Nazanin / DeMara, Ronald F**

Cross-layer Adaptive Rate/Resolution Design for Energy-Aware Acquisition of Spectrally Sparse Signals Leveraging Spin-based Devices

National Science Foundation

\$441,711

College of Engineering and Computer Science

**Reinhart, Debra R**

Characterization of Florida Landfills with Elevated Temperatures - Year 2 (

University of Florida Board of Trustees

\$38,390

College of Engineering and Computer Science

**Savage, Anna E / Hoffman, Eric**

Using disease ecology, population genetics and environmental detection to understand and mitigate a recent African clawed frog (*Xenopus laevis*) invasion in the Tampa Bay area

Florida Fish and Wildlife Conservation Commission

\$41,152

College of Sciences

**Schleith, Susan T**

Energy Whiz

Various

\$10,565

Florida Solar Energy Center (FSEC) - FSEC

**Sherwin, John R**

High Voltage Test Bed for PV Modules

Alliance for Sustainable Energy, LLC/National Renewable Energy Laboratory

\$19,550

Florida Solar Energy Center

**Sherwin, John R**

Performance Evaluation for Natural Weathering of Coated Coupon Samples at the University of Central Florida Field Test Site

Alliance for Sustainable Energy, LLC/National Renewable Energy Laboratory

\$10,600

Florida Solar Energy Center

**Solihin, Yan**

Exploring Lazy Persistency and its Hardware/Software Support for Non-Volatile Main Memory

Intel Corporation

\$45,000

College of Engineering and Computer Science

**Strutt, Tara**

Memory T cell protection of reproductive health following influenza infection  
Eunice Kennedy Shriver National Institute of Child Health & Human Development  
\$409,750  
College of Medicine

**Sun, Wei**

Cyber-Physical Attacks Recovery in Smart Grids: Security, Resiliency, and Interdependency  
University of South Florida  
\$37,500  
College of Engineering and Computer Science

**Valliyil Thankachan, Sharma**

NSF Student Travel Grant for 2018 International Workshop on String Algorithms in  
Bioinformatics  
National Science Foundation  
\$20,000  
College of Engineering and Computer Science

**Wahl, Thomas**

Climate Preparedness and Resilience Community of Practice and Programs  
US Army Corps of Engineers  
\$75,000  
College of Engineering and Computer Science

**Walters, Linda J**

Brevard County SOIRL Living Shoreline Monitoring  
Brevard County Board of County Commissioners  
\$108,704  
College of Sciences

**Wu, Dazhong**

Degradation Modeling and Prognostics for Aircraft Engines Using Ensemble Learning  
NASA Shared Services Center  
\$86,420  
College of Engineering and Computer Science

**Yuksel, Murat**

Multi-Element Mobile Visible Light Communication for Smart Cities (ID: 1065753)  
National Science Foundation  
\$100,000  
College of Engineering and Computer Science